

**ABSTRACT**

Methods and apparatus for executing a lighting program to control a plurality of light emitting diodes (LEDs) in response to at least one characteristic of an audio input.

- 5 In one embodiment, the audio input is digitally processed to determine the at least one characteristic. In other embodiments, control signals for the LEDs are generated in response to a timer and/or input from a user interface, as well as in response to the at least one characteristic of the audio input. In another embodiment, the control signals for the LEDs are generated by a same computer that processes the audio input to transmit
- 10 signals to speakers to audibly play the audio input. In a further embodiment, a GUI is provided to assist in authoring the lighting program. In another embodiment, the audio signal is processed before being played back. In a further embodiment, the lighting program anticipates changes in the audio input.